Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A self-calibrating imaging display system comprising:

a display having a screen;

a display adaptor communicatively linked to the display ~~for causing the display to display upon the screen a test pattern~~;

a plurality of photosensors ~~integrated~~ associated with said screen, said photosensors detecting luminance and color values correlating to distinct luminance and color levels at different regions of said screen;

a calibration module, said calibration module directing the display adaptor to generate and forward to the display a display test pattern including a ~~at least one~~ measurement field comprising ~~a region spanning no more than~~ approximately 10% of a total number of pixels displayed by the screen and cause the measurement field to be stepped through a sequence of values from zero and increasing at each step up to a maximum display driving level (DDL), wherein the measurement field can be placed at different regions of the screen, said calibration module receiving from said photosensors inputs correlating to said luminance and color values, said calibration module determining a plurality of luminance and color correction factors by comparing the detected luminance and color values to reference luminance and color data, different ones of said luminance correction factors being applied to different regions of said screen which are applied to adjust luminance and color of said screen at the different regions, each region spanned by a corresponding measurement field.

2. (Previously Presented) The self-calibrating imaging display system of claim 1, wherein said plurality of sensors comprises an array of photosensors.

3. (Previously Presented) The self-calibrating imaging display system of claim 2, wherein said array of photosensors comprises photosensors horizontally and vertically dispersed over a portion of said screen.

4. (Previously Presented) The self-calibrating imaging display system of claim 3, wherein said portion is a region comprising at least 90% of a surface area of said screen.

5. (Currently Amended) The self-calibrating imaging display system of claim 1, wherein said photosensors are formed into said screen or formed on a transparent sheet disposed on said screen.

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) The self-calibrating imaging display system of claim 1, wherein said calibration module automatically updates said luminance correction factor at predetermined intervals.

10. (Previously Presented) The self-calibrating imaging display system of claim 1, wherein said calibration module updates said luminance correction factor at said different regions responsive to a user input.

11. (Previously Presented) The self-calibrating imaging display system of claim 1, said calibration module generating a calibration record upon an update of said luminance correction factor.

12. (Previously Presented) The self-calibrating imaging display system of claim 1, wherein said imaging display is a medical imaging display.

13. (Cancelled) .

14. (Cancelled).

15. (Currently Amended) A method of calibrating an imaging display system comprising the steps of:

forwarding a display test pattern from a display adapter to a display of the display system, the display test pattern including a ~~generating at least one~~ measurement field comprising ~~a region spanning no more than~~ approximately 10% of a total number of pixels displayed by the display, wherein the measurement field can be placed at different regions of a display screen of the display; ~~screen of the imaging display system and~~

causing the measurement field to be stepped through a sequence of values from zero and increasing at each step up to a maximum display driving level (DDL);

receiving luminance and color values from a plurality of photosensors ~~integrated~~ associated with the display screen, said photosensors detecting distinct luminance and color levels at the different regions of said screen; ~~and~~

from said detected luminance and color levels, determining a plurality of luminance and color correction factors by comparing the detected luminance and color values to reference luminance and color data; and

~~which are applied to~~ applying the determined luminance and color correction factors to the different regions of said screen so as to adjust luminance and color of said

screen at the different regions, each region spanned by a corresponding measurement field.

16. (Previously Presented) The method of calibrating an imaging display system according to claim 15, wherein said at plurality of sensors comprises an array of photosensors.

17. (Previously Presented) The method of calibrating an imaging display system according to claim 16, wherein said array of photosensors comprises photosensors horizontally and vertically dispersed over said screen.

18. (Previously Presented) The method of calibrating an imaging display system according to claim 17, wherein said portion is a region of said screen comprising at least 90% of a surface area of said screen.

19. (Cancelled)

20. (Original) The method of calibrating an imaging display system according to claim 15, further comprising the step of automatically updating said luminance correction factor at predetermined intervals.

21. (Previously Presented) The method of calibrating an imaging display system according to claim 15, further comprising the step of updating said luminance correction factor at said different regions responsive to a user input.

22. (Original) The method of calibrating an imaging display system according to claim 15, further comprising the step of generating a calibration record upon an update of said luminance correction factor.

23. (Canceled).

24. (Cancelled).

25. (Currently Amended) A machine-readable storage having stored thereon a computer program having a plurality of code sections, the code sections executable by a machine for causing the machine to perform the steps of:

forwarding a display test pattern from a display adapter to a display of the display system, the display test pattern including a ~~generating at least one~~ measurement field comprising ~~a region spanning no more than~~ approximately 10% of a total number of pixels displayed by the display, wherein the measurement field can be placed at different regions of a display screen of the display; ~~screen of the imaging display system and~~

causing the measurement field to be stepped through a sequence of values from zero and increasing at each step up to a maximum display driving level (DDL);

receiving luminance and color values from a plurality of photosensors ~~integrated~~ associated with the display screen, said photosensors detecting distinct luminance and color levels at the different regions of said screen; ~~and~~

from said detected luminance and color levels, determining a plurality of luminance and color correction factors by comparing the detected luminance and color values to reference luminance and color data; and

~~which are applied to~~ applying the determined luminance and color correction factors to the different regions of said screen so as to adjust luminance and color of said screen at the different regions, each region spanned by a corresponding measurement field.

26. (Previously Presented) The machine-readable storage of claim 25, wherein said plurality of photosensors comprises an array of photosensors.

27. (Previously Presented) The machine-readable storage of claim 26, wherein said array of photosensors comprises photosensors horizontally and vertically dispersed over a portion of said screen.

28. (Previously Presented) The machine-readable storage of claim 27, wherein said portion is a region of said screen comprising at least 90% of a surface area of said screen.

29. (Cancelled)

30. (Original) The machine-readable storage of claim 25, further comprising the step of automatically updating said luminance correction factor at predetermined intervals.

31. (Previously Presented) The machine-readable storage of claim 25, further comprising the step of updating said luminance correction factor at said different regions responsive to a user input on said screen at said different regions.

32. (Previously Presented) The machine-readable storage of claim 25, further comprising the step of generating a calibration record upon an update of said luminance correction factor.